



DIRECTION GENERALE DE LA COOPERATION  
INTERNATIONALE ET DU DEVELOPPEMENT

**Direction des politiques de développement**

*Sous-direction des politiques sectorielles et des objectifs du  
millénaire pour le développement*

**Bureau des politiques éducatives et d'insertion professionnelle**



## **VOCATIONAL AND TECHNICAL TRAINING ISSUES IN THE AGRICULTURAL SECTOR AND IN THE RURAL MILIEU**

*THE CASE OF WEST AFRICA*

**Alain MARAGNANI**

*January 2008*

*This document has been prepared upon the request of the Ministry of Foreign and European Affairs. The analyses and comments contained herein are solely the work of the author and do not represent official policy.*

## Summary

Sub-Saharan Africa is the region of the world that will witness the greatest population growth between 2000 and 2050 (+ 1.11 billion inhabitants), and it appears most likely that West Africa's population will double by the year 2050. Despite a considerable acceleration in urbanisation rates (by 2015 the 50% urban threshold will have been breached), Sub-Saharan Africa is the only region in the world whose rural population will continue to grow in absolute terms.

These demographic challenges affect the future of all African societies. The agricultural and rural sector, which contributes significantly to GDP and is still the largest employer in West African countries, lies at the very heart of these challenges. Indeed, the sector is currently experiencing an unprecedented crisis, appearing less and less capable of fulfilling its five basic functions: provide people with food, increase States' foreign currency reserves via exportation, preserve natural resources, offer producers a decent living and create viable employment and self-employment.

Vocational and technical training in the agricultural and rural sector is a key component of strategies that need to be promoted in order to overcome these mounting issues in a very short period of time: increase productivity (of the soil, of agricultural labour, of capital in agriculture), guarantee adequate management of rural areas and ensure the viability of farming structures.

Using Pierre Debouvry's analyses as a starting point, French thought on training facilities in the sector has led to ruthless critiques of the training systems that have been set up over the last forty years, now very run down: the strong emphasis placed on lengthy diploma courses (more engineers than technicians, with practically no attention given to farmer education) were maladapted to the need for profound change in the sector and even led to its deterioration. While it is true that there have been some more innovative initiatives undertaken in the last decade or so, better adapted to the rural context and involving a broader cross-section of stakeholders, they often come up against several obstacles, such as a shortfall in basic education in the rural communities and a lack of coordination within national agricultural policy.

What is required, therefore, is a complete overhaul of the training mechanisms. They need to be farmer-centred; they must be regionalised so that they are better integrated; and they need to be in line with national rural and agricultural development policies. One of the major focal points of this overhaul should be to prepare the people who work in the sector, especially the young, for handling this process of farming structure transformation. This "professionalisation" of the rural workforce should be based not only on the acquisition of scientific and technical skills so as to best exploit changing production, manufacturing and marketing techniques, but also on building analytical and managerial capacity and on raising political and social awareness in the name of constructing decentralised democracy and well thought-out management of natural resources.

Given these analyses and observations, *en masse* education and vocational training for young rural people would appear to be a critical element of any development and anti-poverty policy, so as to promote, in these times of change, income-generating activities and growth in the rural sector and to improve people's chances of success if they decide to move to the city.

## Résumé

L'Afrique sub-saharienne est la partie du monde appelée à connaître la plus forte progression de sa population entre 2000 et 2050 (+ 1.11 milliards d'habitants), et selon toute vraisemblance, la population de l'Afrique de l'Ouest doublera d'ici 2050. En dépit d'une accélération considérable des taux d'urbanisation (le seuil des 50% d'urbains devrait être franchi en 2015), l'Afrique sub-saharienne est la seule région au plan mondial dont la population rurale continuera à croître en valeur absolue.

Ces défis démographiques interrogent le devenir de l'ensemble des sociétés en Afrique. Le secteur agricole et rural, qui occupe une place très importante dans le PIB et représente encore la très grande majorité des emplois des pays de l'Afrique de l'Ouest, est au centre de ces défis. Or ce secteur connaît aujourd'hui une crise sans précédent, s'avérant de plus en plus impuissant à remplir ses cinq fonctions de base : nourrir les populations, accroître les ressources en devises des Etats par ses exportations, protéger les ressources naturelles, assurer aux producteurs un revenu décent et générer des emplois et auto-emplois viables.

La formation professionnelle et technique dans le secteur agricole et rural est un élément-clé des stratégies à impulser pour faire face à l'accumulation des enjeux à relever sur une période très courte : augmenter la productivité (des sols, du travail agricole, du capital en agriculture), maîtriser la gestion de l'espace rural, assurer la viabilité des structures d'exploitation.

A partir des analyses de Pierre Debouvry, la réflexion française sur les dispositifs de formation dans le secteur a procédé à l'élaboration de diagnostics sans concession sur les systèmes de formation mis en place au cours des 40 dernières années, aujourd'hui très dégradés : la forte priorité mise sur les formations longues et diplômantes (plus d'ingénieurs que de techniciens, quasi-négligence de la formation des producteurs) ne répondait pas aux exigences de changement en profondeur du secteur et a même contribué à sa dégradation. Certes des actions plus novatrices, associant une large diversité d'acteurs et mieux insérées dans le milieu rural, apparaissent depuis une dizaine d'années, mais elles se heurtent à plusieurs limites, dont l'insuffisance de l'éducation de base des publics et leur manque de coordination dans le cadre d'une politique agricole nationale.

Il s'agit donc de refonder entièrement les dispositifs de formation en les recentrant sur les producteurs et productrices, en les régionalisant pour faciliter leur intégration et en les articulant sur des politiques nationales de développement rural et agricole. L'un des enjeux majeurs de cette refondation sera de préparer les forces vives du secteur, particulièrement sa jeunesse, à la conduite du processus de transformation des structures d'exploitation. Cette « professionnalisation » des acteurs devra reposer, non seulement sur l'acquisition de compétences scientifiques et techniques afin de maîtriser les évolutions des techniques de production, de transformation et de commercialisation, mais aussi sur un accroissement des capacités d'analyse et de gestion ainsi que sur une formation citoyenne pour la construction d'une démocratie décentralisée et la gestion raisonnée des ressources naturelles.

A l'issue de cette analyse, l'éducation et la formation professionnelle et technique de la grande masse des jeunes ruraux apparaissent comme un des impératifs d'une politique de développement et de lutte contre la pauvreté, afin d'accompagner les changements par la promotion d'activités génératrices de revenus et de croissance en milieu rural, mais aussi d'accroître les chances de réussite pour ceux qui s'installeront dans les villes.

## Resumo

A África subsaariana é a região do mundo que terá a mais forte progressão da sua população entre 2000 e 2050 (+ 1.11 mil milhões de habitantes), e, muito provavelmente, a população da África Ocidental será multiplicada por dois até 2050. Apesar de uma aceleração considerável das taxas de urbanização (o patamar dos 50% de urbanos deveria ser ultrapassado em 2015), a África subsaariana é a única região no mundo cuja população rural continuará a crescer em valor absoluto.

Estes desafios demográficos constituem uma preocupação para o futuro de todas as sociedades em África. O sector agrícola e rural, que ocupa um lugar muito importante no PIB e ainda representa a imensa maioria dos empregos dos países da África Ocidental, está no cerne destes desafios. Ora, este sector atravessa hoje uma crise sem precedentes, cada vez menos capaz de cumprir as suas cinco funções básicas : alimentar as populações, aumentar os recursos em divisas dos Estados graças às suas exportações, proteger os recursos naturais, garantir aos produtores um rendimento digno e gerar empregos e ocupações independentes viáveis.

A formação profissional e técnica no sector agrícola e rural é um elemento-chave das estratégias a fomentar para enfrentar a acumulação de desafios num período muito curto : aumentar a produtividade (dos solos, do trabalho agrícola, do capital em agricultura), dominar a gestão do espaço rural, garantir a viabilidade das estruturas de exploração.

A partir das análises de Pierre Debouvry, a reflexão francesa sobre os dispositivos de formação no sector elaborou diagnósticos sem concessão sobre os sistemas de formação instaurados nos últimos 40 anos e hoje muito degradados : a forte prioridade dada às formações longas, diplomando mais engenheiros do que formando técnicos, e negligenciando a formação dos produtores, não correspondia às exigências de mudança em profundidade do sector e até contribuiu para a sua degradação. Está certo que acções mais inovadoras, associando actores muito diversos e melhor inseridos no meio rural têm surgido na última década, mas elas encontram vários limites, entre os quais uma educação básica carente e a falta de coordenação no âmbito de uma política agrícola nacional.

Há por conseguinte que revisitar totalmente os dispositivos de formação concentrando-os sobre os produtores e produtoras, regionalizando-os para facilitar a sua integração e articulando-os com as políticas nacionais de desenvolvimento rural e agrícola. Um dos principais desafios desta reorganização será de preparar as forças vivas do sector, em particular a juventude, para a condução do processo de transformação das estruturas de exploração. Esta “profissionalização” dos actores deverá depender, não apenas da aquisição de competências científicas e técnicas para dominar as evoluções das técnicas de produção, de transformação e de comercialização, mas também para aumentar as capacidades de análise e de gestão bem como de uma formação cidadã para a construção de uma democracia descentralizada e a gestão criteriosa dos recursos naturais.

Ao cabo desta análise, a educação e a formação tanto profissional como técnica da grande maioria dos jovens rurais aparecem como sendo um dos imperativos de uma política de desenvolvimento e de luta contra a pobreza, a fim de acompanhar as mudanças promovendo actividades geradoras de rendimentos e de crescimento em meio rural, mas também aumentando as chances de sucesso para aqueles que irão instalar-se nas cidades.

# VOCATIONAL AND TECHNICAL TRAINING ISSUES IN THE AGRICULTURAL SECTOR AND IN THE RURAL MILIEU

## THE CASE OF WEST AFRICA

*This text summarises the findings of various studies and work led by Pierre Debouvry over the last decade or so on vocational and technical training issues, agricultural and rural, in developing countries in French-speaking Africa. These studies were made possible, depending on the countries in question, thanks to funding from France (Foreign Affairs Ministry), Germany (GTZ) and the World Bank using French funds held in trust.*

*An initial phase, from 1991 to 1996, essentially covered the following countries: Burkina Faso, Chad, Côte d'Ivoire, Madagascar, Mali, Mauritania, Niger, Senegal and Togo. In the second phase, beginning in the early years of the decade 2000, new studies were undertaken (2001-2005) for the drafting of National Agricultural and Rural Training Strategies (known by the acronym SNFAR in French) in four West African countries: Benin, Burkina Faso, Mali and Senegal.*

*What characterises the approach used in the studies since the 1990s in the different French-speaking West African countries is the way that it interconnects several parameters: demographic projections and their economic and social consequences for the agricultural sector and rural milieu, the current characteristics of agricultural and rural education, assessment of agricultural and rural human resource training requirements in the short- and medium-term.*

*The first part of this text analyses demographic changes in African countries, and in particular French-speaking Africa, and developments in the agricultural sector and rural milieu.*

*The work conducted by Pierre Debouvry, since the beginning of the decade 2000, provided fuel for French thought on vocational and technical training issues in the agricultural sector and rural milieu in Francophone Africa.*

*With this as its basis, the second part, also building on new studies that were carried out with support from the French Ministry of Foreign Affairs or under the auspices of other French and international bodies, examines the vocational and technical training mechanisms, agricultural and rural, and their prospects for development.*

## PART ONE

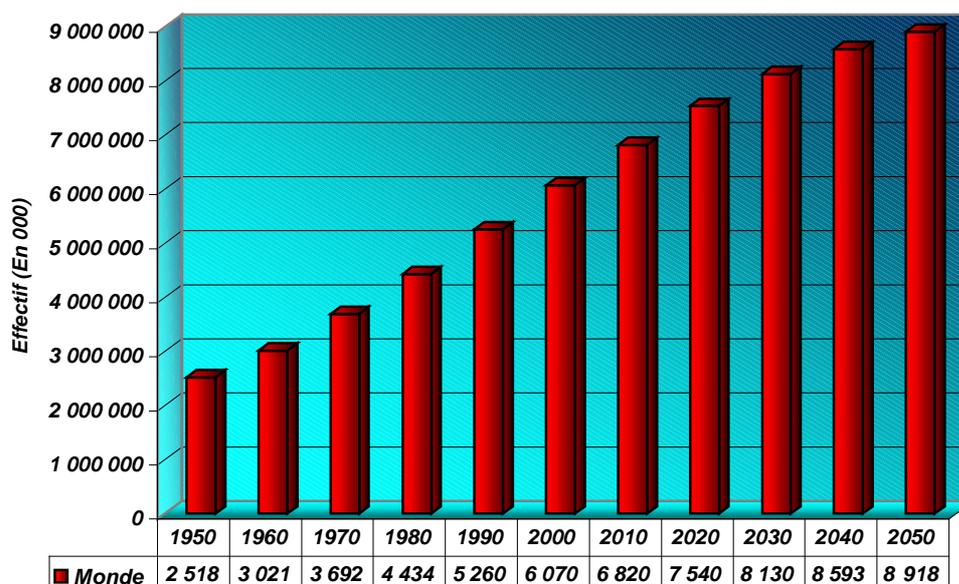
# CARACTERISTICS OF THE AGRICULTURAL SECTOR AND RURAL MILIEU IN FRENCH-SPEAKING AFRICA

## 1/ DEMOGRAPHIC CHARACTERISTICS THAT NEED TO BE TAKEN INTO CONSIDERATION

Global demographic changes have been marked and rapid, causing fundamental changes. The world's population, 1 billion in 1830, now stands at an estimated 6.6 billion and **could reach 9 billion by the year 2050**<sup>1</sup>.

### Changes in the world's population (1950-2050)

#### Évolution de la population mondiale(1950-2050)

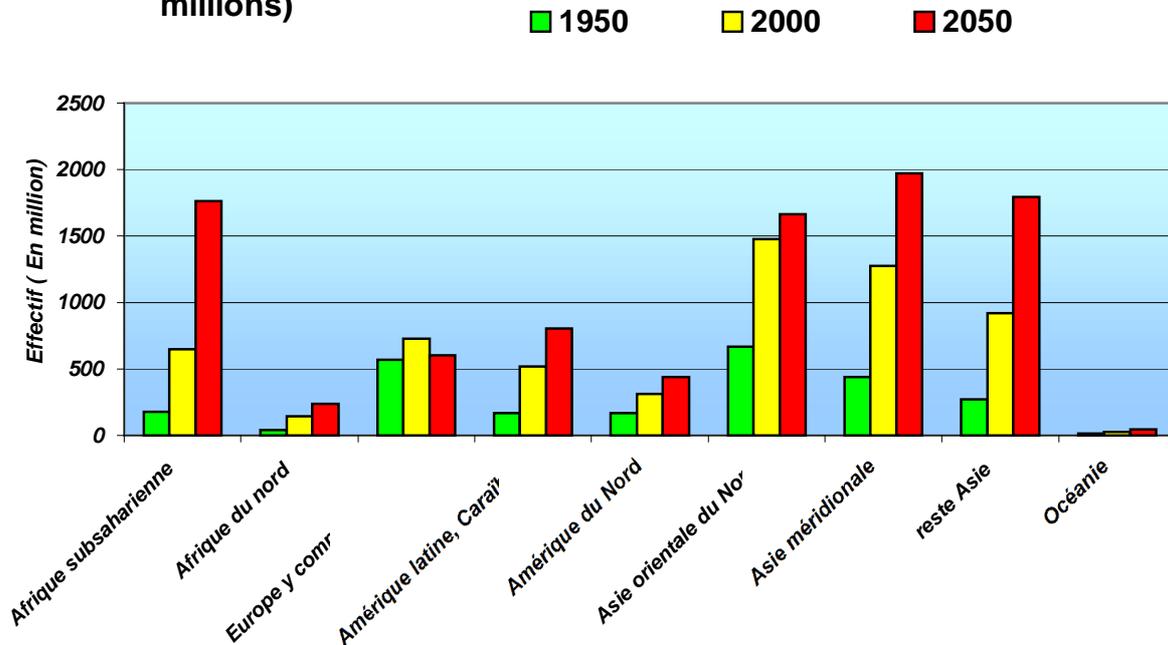


This growth, resulting from a sharper drop in mortality rates than in birth rates, varies greatly from sub-region to sub-region around the world.

<sup>1</sup> All figures in this chapter are from FAO and UNDP data.

### Changes in the world's population by major region (In millions)

### Evolution de la population mondiale par grande région (En millions)

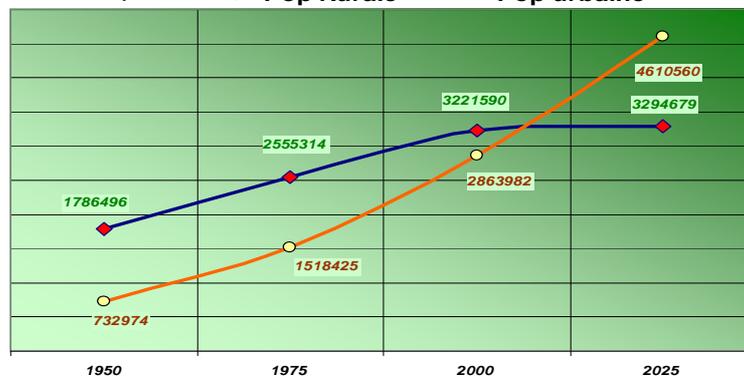


**Sub-Saharan Africa will experience the greatest increase between 2000 and 2050 (+ 1.11 billion)** ahead of South-East Asia (+ 872 million) and South Asia (+ 696 million). It appears likely that West Africa's total population will double by the year 2050, which indicates a multiplier effect of 14.6 in 120 years (between 1930 and 2050).

Urbanisation is continuing to grow at an unprecedented rate. Most of the world's population now lives in cities (as compared to 29% in 1950). Nevertheless, since the end of the Second World War, urbanisation has no longer been yoked to industrialisation and economic growth and the city is no longer synonymous with employment for a rural workforce fleeing poverty in the countryside.

#### World: Changes in rural and urban populations

#### Monde : Evolution des populations rurale et urbaine (En 000)



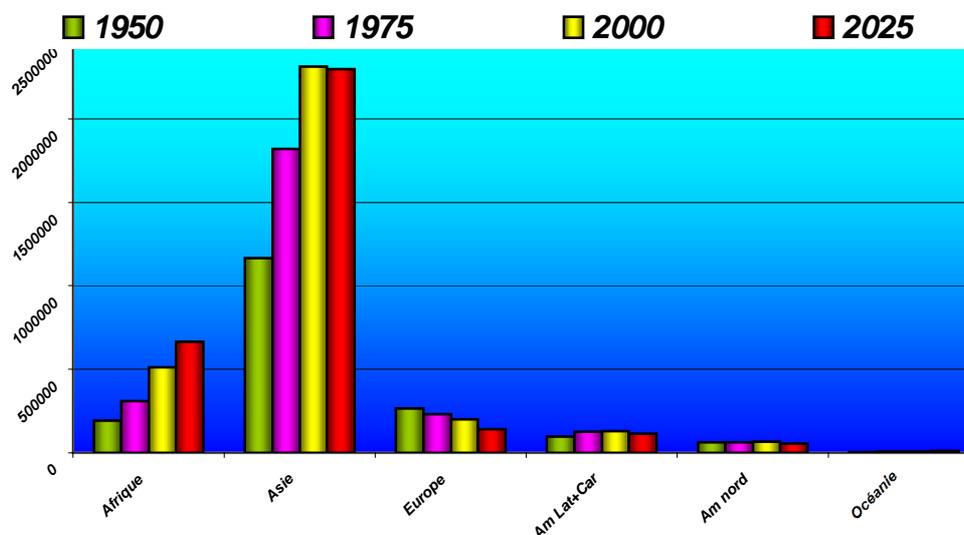
In Africa, only five per cent of the population lived in urban centres in 1900; 20% in 1960; 42% today. At a rate of over 4% per year, **the current urban growth rate in Africa is the highest in the world** (with the rate doubling every 17 years or less).

With a labour force that will grow from 138 million in 2010 to 258 million in 2030, the urban population in West Africa will practically double over the next 20 years.

If the rural population around the world stagnates, two continents will at least retain a high rural population: Africa and Asia.

World: Changes in rural populations per continent

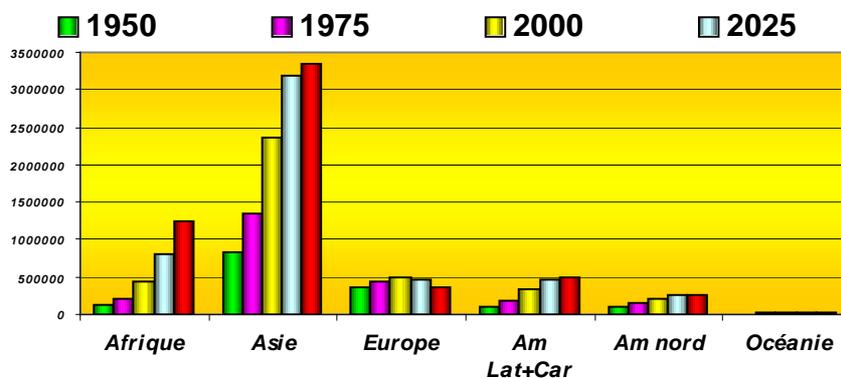
Monde: Évolution du nombre de ruraux /continent  
( En 000 )



**Sub-Saharan Africa will pass the 50% urban threshold by about 2015. It is the only region in the world whose rural population is continuing to grow in absolute terms** even though its relative value is diminishing. Everywhere else in the world, rural population figures are stagnating or decreasing.

Two continents are experiencing strong surges in their working-age population: Asia, with exceptional growth (+ 833 million between 2000 and 2025) that is likely to be followed by a considerable slowdown (+ 172 million between 2025 and 2050) and Africa (+ 352 million and + 460 million respectively).

Evolution de la population active /continent ( En 000 )

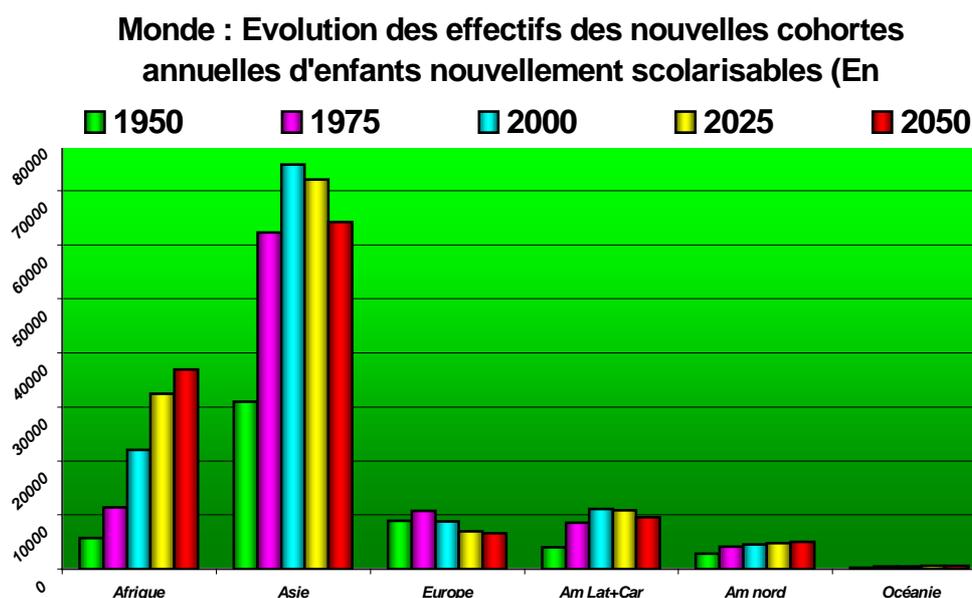


Changes in working-age population per continent (In 000)

**Between 2000 and 2050, the working-age population in Africa looks set to more than triple in number** (2000: 121,242,000; 2050: 385,407,000 which means a multiplier effect of 3.2 for the first half of the 21st century) as a result of the sizeable groundswell of young people coupled with fewer departures of older people. The subject of employment and self-employment is becoming and will continue to become more and more crucial.

This demographic expansion means that there is a much greater quantitative demand for primary education, especially in Africa and Asia.

### World: Changes in annual numbers of primary level new entrant-aged children (In 000)



**In West Africa, the number of children reaching the age upon which they are to become new entrants at primary school will continue to grow until 2040** (6,625,000 in 2000; 13,124,000 in 2040), before a decline in numbers occurs after this date. These realities serve to remind us that we are talking about a mass phenomenon.

## 2/ AN AGRICULTURAL SECTOR THAT IS HAVING INCREASING DIFFICULTY PERFORMING ITS VARIOUS FUNCTIONS

Given the agricultural sector's five functions in economic and social development, underscored in Pierre Debouvry's studies, in cooperation with Christian Fauliau, the agricultural sector in West Africa today is in fact struggling to fulfil its functions.

### 2.1/ Provide people with food

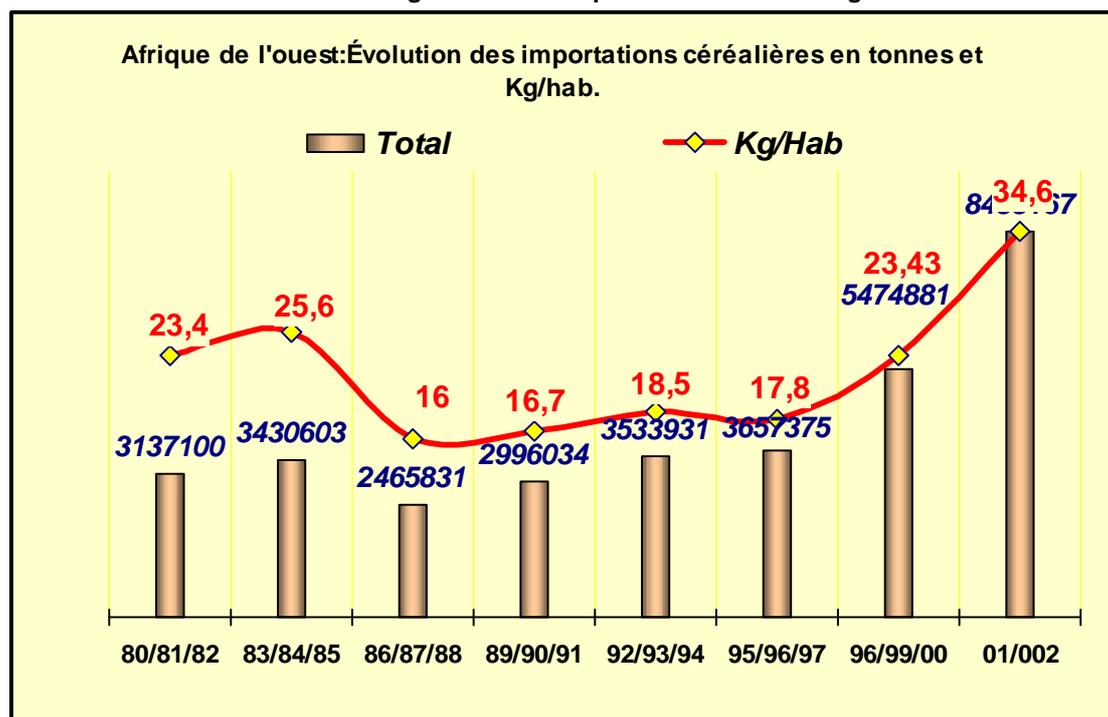
While all economic sectors play a role in the development of society, the agricultural sector and the rural milieu play an absolutely vital one in that they make one very palpable contribution: providing people with food!

Agricultural production is of crucial importance for food security in the dozen or so sub-Saharan African countries with about 200 million inhabitants which are continuously facing hunger crises and yet which can

only import a limited amount of foodstuffs to meet the population's needs because of shortfalls in their foreign currency reserves.

**West Africa has constantly increased its cereal imports since 1985 in order to feed its population** (an average of 2,465 million tonnes per annum for the period 1986/87/88; 8,488 million tonnes for 2001/02/03). These increases are disproportionate to the overall population growth because its "per capita" importation has also been on the rise (16 kilos / inhabitant / yr. for the period 1986 / 87 / 88 and 34.6 kilos / inhabitant / year for 2001 / 02 / 03), which indicates a growing dependence on foodstuffs and agricultural products in the countries of this sub-region.

**West Africa: Changes in cereal imports in tonnes and Kg/inhab.**



## 2.2 Increase States' foreign currency reserves.

Generally, major export products are undergoing a period of stagnation or even recession. Market garden and horticultural produce is growing, but very slowly. The only segments experiencing significant growth are cacao (1961- 1963: 737,000 t; 2003 - 2005: 2,382,000 t) and cotton (1961- 1963: 62,000 t; 2003 - 2005: 872,000 t).

According to various sources, these increases are very much more linked to larger plantation sizes than to any improvement in yields. Cotton, which is a vital crop for many rural communities, faces stiff competition on the world market from countries that practise intensive cotton cropping (notably from countries that subsidise their agricultural industry).

## 2.3/ Preserve natural resources.

One corollary of demographic growth is that rural population density has swelled noticeably in West and Central Africa since 1930 (four-fold increase) and appears set to continue for the next twenty years (six-fold increase from 1930 to 2020). Such an increase in rural population density has meant that natural resources are being utilised to a greater extent than before without any change in the farming systems or management methods. The resultant intensive deforestation, over-farming and over-grazing have led to

**soil fertility depletion, impoverished biodiversity, serious risk of erosion and an overall deterioration of the environment.**

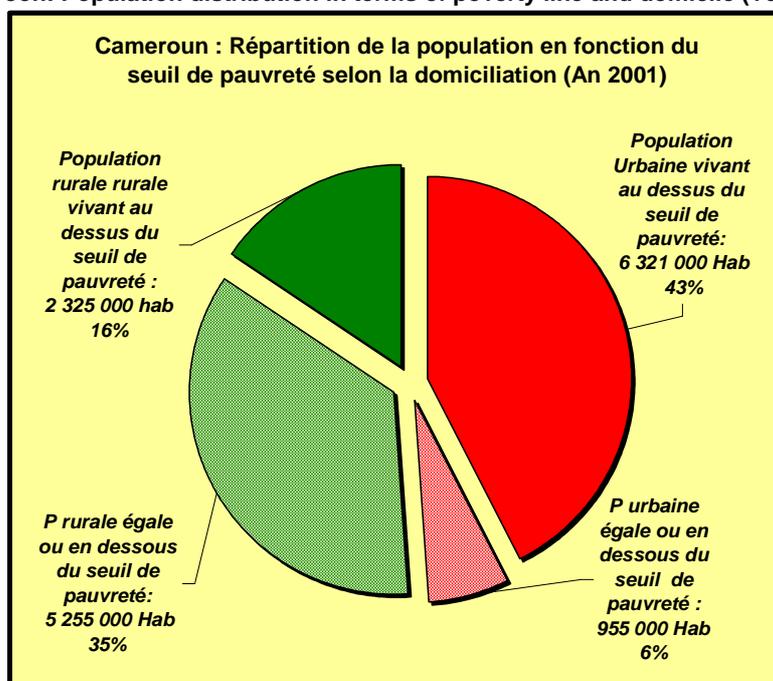
Between 2000 and 2005, Africa registered an annual net deforestation of 4 million hectares due, essentially, to the conversion of forestland into arable land<sup>1</sup>. For example, in Côte d'Ivoire, cacao cropping has been developed to the detriment of forest, which has shrunk, in thirty years, from 12 to 2 million hectares in area.

Overexploitation of cropping and grazing land exacerbates the risks of desertification while overexploitation of halieutic resources poses a serious threat to fish stocks and jeopardises the future of the small-scale fishing sub-sector.

#### 2.4/ Offer producers a decent living

The rural sector is generally a host to poverty, even extreme poverty. More than 1.3 million people live below the poverty line and three quarters of them live in rural areas. In every region of the world, the number of poor workers dropped in 2005 except in sub-Saharan Africa where it increased by 2,500,000<sup>2</sup>.

**Cameroon: Population distribution in terms of poverty line and domicile (Year 2001)**



**Population distribution according to poverty line in Cameroon**

In sub-Saharan Africa, 44% of the population lives in extreme poverty, a level similar to that of 1990.

**Eradicating poverty means first eradicating it in the rural milieu!**<sup>3</sup>

Increased population density in the rural milieu leads, because of inheritance patterns, to the fragmentation of farming plots, which become less and less viable over time, exacerbating poverty.

<sup>1</sup> FAO. 15<sup>th</sup> session, African Forestry and Wildlife Commission; Maputo, 1 April, 2006.

<sup>2</sup> 2005 Report, ILO

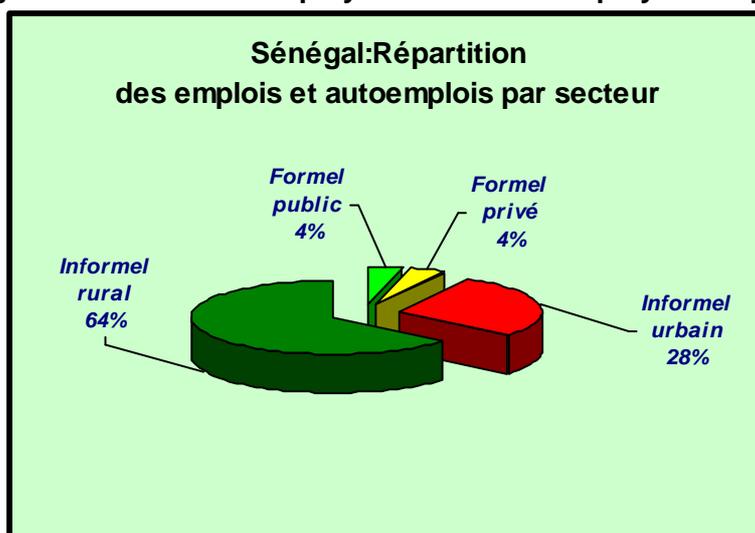
<sup>3</sup> "Cross-country econometric evidence indicates that GDP growth generated in agriculture is at least twice as effective in reducing poverty as growth from other sectors". World Bank. "World Development Report – Agriculture for Development". 2008.

## 2.5/ Create employment and self-employment

Currently, despite the growth in urbanisation, the rural sector still represents the vast majority of employment and self-employment in each of the West African countries (ranging from 64% in Senegal to 87% in Burkina Faso).

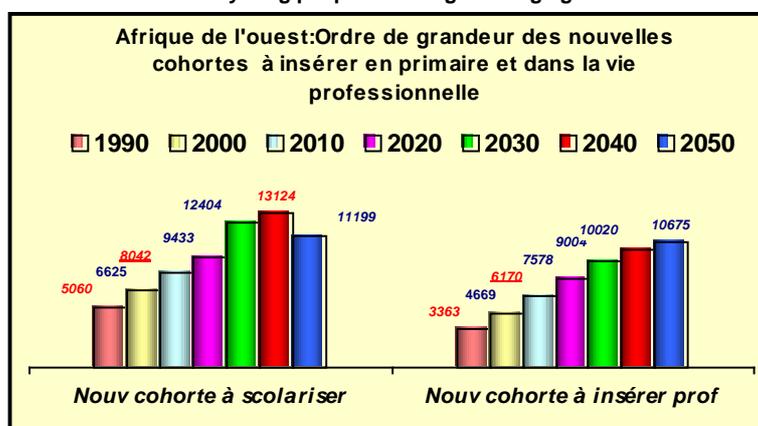
Changes are not occurring in developing countries' economies along the same lines as for developed countries: industrialisation is still weak in developing countries; the development of qualified salaried employment remains minor. The bulk of economic activity comes in the form of self-employment in the informal sector, especially in agriculture.

### Senegal: Distribution of employment and self-employment by sector



It is therefore mostly in the agricultural sector, and more broadly speaking in the rural milieu, that these young people are able to become economically and socially integrated. In the current context of traditional devolution, which makes it difficult for young people to access property, the degradation of farming structures, lack of policy initiatives encouraging young farmers to settle, and rapid urbanisation, **it is very difficult for the agricultural sector to fulfil its function of creating jobs and self-employment, which further stimulates urban drift.**

### West Africa: Numbers of children reaching primary level new-entrant age and numbers of young people reaching working age



### 3/ KEY ISSUES TO RESOLVE

The agricultural sector is a vital motor of economic growth in developing countries. In sub-Saharan Africa, agriculture is the primary driver of economic growth<sup>1</sup>. Despite the alarming trends outlined in the last paragraph, agriculture still produces the bulk of the foodstuffs consumed, represents 34% of GDP, corresponds to 40% of all goods exports and remains the main employer of labour power (70%) and, therefore, also the main generator of income<sup>2</sup>. The sector is also the chief source of raw materials for industry and the main purchaser of simple tools and services (in the form of transport).

While once perfectly adapted to their context, traditional agricultural production systems in French-speaking West Africa these days are showing **ever-clearer signs of obsolescence**. This explains why it is becoming more difficult for agriculture to fulfil its functions in terms of economic and social development. If it is ever to reverse the downward trend, West African agricultural development must resolve some major issues.

#### 1. First issue: soil productivity

Demographic growth has led to a dramatic increase in population density (both in total and in the rural milieu), which calls into question traditional natural resource management practices (long fallow spells, grazing land use, etc), which are based on limited utilisation thereof and natural replenishment of flora, fauna and soil fertility. Since utilisation has become intensified (shorter fallow periods), traditional management practices have lost their compatibility with the natural cyclical rhythms and therefore natural replenishment is increasingly hampered (soil impoverishment, parasite infestation, soil erosion, etc). A major challenge to overcome in the upcoming decades is sustainable improvement of soil productivity and grazing land by introducing new agricultural and farming practices that are compatible with current and future population densities.

#### 2. Second issue: productivity of agricultural labour

The fact that the urban population growth rate is higher than its rural counterpart has meant rapid change for the “urban population/rural population” ratio. In the past (1960), the agricultural products and basic foodstuffs for an urban dweller were produced by 20 rural dwellers. Today, that same urbanite is to be nourished by 1.5 rural dwellers and tomorrow (2010-2020), by just 1 rural dweller. In order to maintain food self-sufficiency, the marketable surplus per producer must therefore be multiplied by 15. So far there has been no multiplication at all and foodstuff and agricultural product imports are increasing.

#### 3. Third issue: productivity of capital in agriculture

If producers are to raise soil and labour productivity, then they require more agricultural and livestock equipment. These two elements, which form part of the creation of farm capital, can only be developed if they offer the farmers a certain minimal profitability, in terms of comparative advantage, with regard to a similar investment made in the urban sector. The productivity of capital in agriculture raises the issue of the farmers’ ability to defend their own interests via the professional organisations that are currently emerging.

---

<sup>1</sup>21<sup>st</sup> Session of the FAO Regional Conference for Africa – Public Investment and Agricultural Development in Africa. Yaoundé, 21-25 February, 2000.

<sup>2</sup> “In agriculture-based countries, it generates on average 29% to the gross domestic product (GDP) and employs 65% of the labour force. The industries and services linked to agriculture in value chains often account for more than 30 percent of GDP in transforming and urbanised countries”. World Bank. “2008 World Development Report – Agriculture for Development”.

#### **4. Fourth issue: successful management of rural areas**

The non-replenishment of flora and fauna through shorter fallow spells leads to erosion and an overall impoverishment of biodiversity. Such phenomena may be exacerbated by unchecked reliance on mechanisation, involving the clearing of stumps and roots from fields and the use of chemicals (fertilisers, pesticides, etc), which may be pollutants. Agricultural practices that are maladapted to the new context and population movements create visible anthropisation of rural space by the massive and unbridled destruction of its natural resources.

#### **5. Fifth issue: ensure the viability of farming structures**

Because of inheritance patterns, plots of farmland are undergoing fragmentation. As a result of this, they are not at all following the path of development toward viable and developable farming units, which is the only way to ensure veritable agricultural development and the well being of rural communities. The "farming structure" issue assumes an undeniable societal aspect when pro-active policies are implemented, in particular, to reconvert certain activities to alternative activities in the rural or urban milieu. **The specificity of the agricultural situation in West Africa lies in the fact that all of these issues are rolled together, and require a solution in a very short space of time**, while European countries had several centuries to overcome these various problems.

## PART TWO

### WHICH AGRICULTURAL AND RURAL TRAINING MECHANISMS?

Pierre Debouvry's work has fuelled French thought, since the beginning of the decade 2000, on vocational and technical training issues in the agricultural sector and rural milieu in Francophone Africa.

With this as its basis, the French Ministry of Foreign Affairs spearheaded consideration of its strategic orientations and lent its support not only to new studies but also to the creation of an international network of experts, the FAR network<sup>1</sup>, entrusted with the task of developing exchanges and analyses of agricultural and rural training. Today other bodies are also participating in this think-tank process: the French Development Agency (the GEFOP International Seminar<sup>2</sup>) or the FAO (workshops on the Education for Rural People programme<sup>3</sup>) and so on. This second Part attempts to offer an update, based on Pierre Debouvry's analyses, of recent thought on these issues.

#### 1/ THE NEED TO TAKE INTO CONSIDERATION THE INTERDEPENDANCE BETWEEN THE RURAL MILIEU AND THE AGRICULTURAL SECTOR

While the rural milieu in West Africa is focused mainly on agricultural production, it nevertheless comprises many and greatly varied activities:

- production activities that are both upstream from the agricultural sector: manufacture of tools and equipment; and downstream: processing of foodstuffs and agricultural produce;
- service activities related to agriculture: credit, marketing, transport, storage, animal health, agricultural consultancy, etc;
- small-scale production activities and trades: building, mechanical, carpentry, boiler making, weaving, basketry, sewing, pottery, catering, etc;
- services: commerce, education, health, administration, etc;

It is important, however, to reflect on the complementary nature of the various activities conducted in the rural milieu:

- there is no strict "boundary" between agricultural production, processing and marketing of foodstuffs and agricultural produce, nor with local trades and services... survival of the family unit as a whole depends on diversity and the complementary nature of diversified income-generating activities (multi-activity);
- development of the agricultural sector is only possible if it goes hand in hand with development of the upstream and downstream activities (supplies, storage, processing, distribution, etc) and of the corpus of services (health, education, commerce, transport, trades, etc), which help support the rural community;
- finally, it is important to prepare rural communities for their vital role in their own development, so that they can take their future into their own hands and become true partners and negotiators with the various economic agents at work and State representatives.

---

<sup>1</sup> The French acronym FAR stands for *Formation Agricole et Rurale* (Agricultural and Rural Training).

<sup>2</sup> The French acronym GEFOP stands for *Groupe d'Experts en Formation Professionnelle* (Group of Experts on Vocational Training). "Vocational Training at the Heart of Development Policies". UNESCO, Paris, 12 November, 2007.

<sup>3</sup> FAO / Association for the Development of Education in Africa. "*Workshop on Education for Rural People in Africa*". FAO, Rome, Italy. 28-29 November, 2007.

The rural milieu can also be characterised by its immense variety of stakeholders: farmers, agricultural consultants or extension workers, storekeepers, trades workers, service providers, etc. The rural milieu must therefore be taken as a complex economic, social and cultural ensemble. Family farms, focused on agricultural production, include an array of different activities and, contrary to the conventional image of the 'everlasting order of the land', these family farm units are undergoing extremely rapid changes.

While it is imperative that agricultural development, as a sectoral concept (economic sector), on the one hand, and rural development as a spatial concept, on the other hand, be considered separately, it is nonetheless true that these two issues are inextricably interlinked in terms of employment and self-employment. Given the demographic characteristics of many developing countries, it is also in non-agricultural rural activities that younger generations will see the development of employment and self-employment.

## **2/ DIAGNOSIS OF AGRICULTURAL AND RURAL VOCATIONAL AND TECHNICAL TRAINING MECHANISMS**

Over and above the economic and social importance of the rural milieu and the agricultural sector in developing countries, the current plight of agriculture and the specificities of the rural milieu require innovative solutions.

### **2.1/ Overwhelming need for vocational and technical training**

The way that farming activities are carried out, which are directly related to demographic changes and to the extension of the market sector, will change at a faster and faster pace over the next thirty years. These profound changes will most likely be too rapid in relation to the self-directed knowledge adaptation and production patterns of farmers, often based on empirical, hands-on approaches. The production of new knowledge is further hampered by the fact that most of these people are illiterate.

To quickly overcome this broad range of problems, it is vital for farmers to be able to grasp and utilise the scientific and technical knowledge that will enable them – and this is particularly true for the younger generations – to keep up with the changes afoot.

The sheer speed of change and the complexity of these phenomena require, in particular, capacity building in terms of analysis, anticipation, adaptation and innovation for the farmers and indeed all rural stakeholders. Prerequisites for such capacity building are access to information, acquisition and understanding of new knowledge that is tailored to local knowledge and practices, via the implementation of new approaches to participative research.

**Education and vocational training are not only the people's right; they are also an absolute economic and social necessity, especially for rural communities!**

### **2.2/ The rural milieu's compounding handicaps regarding education and vocational training**

While the advancement of education and vocational training is a vital element for economic development, the rural milieu and the agricultural sector can nevertheless be characterised by:

- limited access to education: less dense school network, long distances to schools, higher illiteracy rates in the rural milieu, low enrolment rates for girls, strong demographic increase in numbers of children needing to be taught to read and write, etc.
- practical conditions generally more difficult: mediocre equipment, lack of teaching material, classroom overcrowding, no boarding facilities, high teaching staff turn-over, poorer support mechanisms for girls, etc.
- programme content more oriented toward urban-appropriate knowledge and skills, with school terms maladapted to rural production and life cycles;
- languages of instruction not the languages spoken by the rural communities;
- loss of skills due to migration.

### 2.3/ Existing training mechanisms that are run-down and fail to meet current needs

The existing education mechanisms, established just after independence, have favoured lengthy, qualification-focused courses, oriented toward “modern” sectors (such as the State sector and major public or private companies), so as to train the personnel required for the emerging State apparatus as well as to institute cash cropping for export development.

The crisis in the nineties led to a halt in civil service recruitment intakes and caused a major upset in agricultural education, whose graduates were almost exclusively headed for this sector: halt or reduction of student intake, fewer teaching staff, no programme renewal, infrastructure and equipment deteriorating, no link with agronomic demand and research, etc.

Despite the scale of rural stakeholders’ educational needs, agricultural education systems are, generally, decrepit: regulation split among several Ministries, compartmentalisation between different levels and even among equivalent levels, no links between primary, secondary and technical education systems, centralisation, no proximity with professional agricultural milieu and research, maladapted programmes, serious flow imbalance – with no heed paid to equity or efficacy – to the detriment of basic vocational courses, no link at all with a national agricultural policy, which is more often than not nonexistent anyway.

The existing agricultural education mechanisms, which train more engineers<sup>1</sup> than technicians and precious few farmers, are not providing the solution to the needs generated by fundamental changes in the agricultural sector and rural milieu. They are ill equipped to adapt to the current context, to ensuring the integration of young people, to offering continuing education programmes for workers or provide responsive solutions to training requirements. It could safely be concluded that **this situation is seriously threatening to exacerbate the exodus from rural areas to urban centres, which are failing to provide adequate employment opportunities, as well as migration to countries in the North.**

Over the last ten years, it is true, new education stakeholders have appeared on the rural scene (NGOs, small-farmer and peasant organisations, private bodies, management centres, etc) and have set up new training mechanisms: vocational continuing education for farmers, marketing group representatives, credit networks, youth integration support, etc. These new education mechanisms generally enjoy widespread integration in the local communities and employ active and participative training techniques, such as programmes combining coursework and practical experience. However, this attempt to adapt to rural development needs comes up hard against several obstacles:

- **shortcomings in basic education** which determine not only the vocational training to be imparted to the farmers, but also their ability to manage the responsibilities and the economic and socio-political activities transferred to them;
- **implementation of limited initiatives for “targeted” groups** (leaders of small-farmer collectives, young people who have dropped out of school and returned to their village, consultants, etc), which fail to satisfy the need for “en masse” training;
- **no coordination for these initiatives under a national agricultural policy**, insufficient capitalisation, weak overall assessment of these initiatives.

### 3/ “OVERHAULING” THE AGRICULTURAL AND RURAL TRAINING MECHANISMS

In order to ensure Nations’ human development, especially in West Africa, vocational agricultural and rural training is an absolute necessity, without which there will be an increase in the number of excluded people and the degree of their marginalisation in the rapidly changing global economy. Without considerable effort to stem this risk, some countries – and even whole sub-regions – will soon be well on their way to becoming pockets of poverty, hopelessness or violence the scale of which may be too great for humanitarian aid alone to remedy.

---

<sup>1</sup> The cost of one year of studies for an engineer is the same as the cost of a year’s primary schooling for 50 children (IREDU, the French Economics and Education Research Institute, Georges SOLAUX).

Work conducted under the National Agricultural and Rural Training Strategies in four West African countries has underscored the need for the following general reorientation:

1. **Refocusing the training on farmers** via post primary training mechanisms and education of those communities involved in a process of devolution who could quickly become the critical mass necessary for transforming farming as an occupation;
2. **Restoring the balance of flows** of the various categories based on the above-mentioned refocused training;
3. **Regionalisation of training mechanisms** so as to facilitate their integration within the framework of the decentralisation process;
4. Ensure **funding continuity** for the new mechanisms by establishing a fund managed through equal representation that is independent of the State budget;
5. Redefinition of **course content** which takes farming into consideration in the overall context of its environment and the changes it is experiencing.

There are some points of convergence in current thinking on these issues:

- **reorganisation of courses leading to certification on the basis of degree courses** [the vocational training certificate known as *CAP* in French (equivalent to the *BEPC* exam taken at the age of fifteen); *Brevet de Technicien*, the vocational training certificate taken at the age of sixteen; the vocational *Baccalaureate professionnel* (equivalent to the school-leaving certificate)] and consideration given to new orientations for graduate and post-graduate levels of study (3, 5 or 8 years of tertiary study);
- **attempts to identify initiatives to encourage the emergence of a private sub-sector** of agricultural training in forms yet to be defined;
- the observation that it is impossible to offer en masse farmer training (tens of thousands every year) through training centres, and yet how very worthwhile **networked formulae** are, such as those developed in the experimental programme, Rural Occupation Centres (Côte d'Ivoire), or Local Committees for Coordination of Farmers' Organisations (Senegal);
- the need to target **post primary, literate groups**, who are likely to progress rapidly under the "**Education For All**" programmes, as a priority for this "basic and en masse vocational training".

The impact of the approaches undertaken will depend largely on the ability to foster a **process of social construction**, which presupposes:

- prior identification of the various **stakeholder groups and sub-groups** concerned, both at the regional and national levels;
- the ability to act as an **intermediary** for facilitating the emergence of an intra-group consensus and then later an inter-group consensus.

There is an absolutely urgent need to redefine family agriculture in a manner commensurate with the challenges of this new century. This presupposes a **policy for farming and for training that encompasses the various different stakeholder groups** as an extension to the national "*Education For All*" programmes that should ensure universal access to primary education, including rural children. The demographic and economic weight of the communities in question affords it undeniable societal importance.

Such an overhaul necessitates input and assistance, and joint and coordinated support, from bilateral and multilateral cooperation. **It also has to be mainstreamed into a national strategy, decided upon officially, and with agreement from all stakeholder groups, arising from the promulgation of an agricultural orientation law.**

## 5/ GUIDING PRINCIPLES

From the studies and analyses conducted over the last few years, as well as from recent discussions, notably among vocational and technical training stakeholders within the *Formation Agricole et Rurale* network (representatives of States administrations, professional organisations, non-governmental organisations, teachers and educators) we can today deduce a few guiding principles for implementing vocational agricultural and rural training mechanisms.

### 5.1/ Professionalise the vast majority of stakeholders

If they are to meet the development challenge, rural societies must “professionalise”, which means making the shift from small-farmer communities to a society made up of family farm units, organised to stand up for and manage their own interests, across the board: integration into the national and international market economy, monitoring of agro-food imports, involvement in the process of deciding land use and property planning policies, participation in the implementation of farming and credit policies, integration in regional development bodies, participation in drafting and managing vocational and technical agricultural and rural training mechanisms.

The younger generations must spearhead a difficult transformation in small-farmer production units, adapting them to the demands of the emerging context, and calling into question many of the foundations of the traditional production unit. **The major challenge for the agricultural sector in the coming years will be to prepare its workforce, especially the young, for handling this process of transformation of farming structures**, which also raises the entirely new issue for these countries of providing en masse training for youth and for rural households and ensuring that it fits in with basic education mechanisms.

### 5.2/ Form part of a national rural development policy

This overhaul of vocational training mechanisms must be integrated into a national strategy, negotiated and settled by all stakeholder groups, which should be part of an agricultural orientation law able to take into consideration, in a coherent manner, complementary initiatives in aid of family farms in the following different domains:

- production structures (access to land, land consolidation, planning, etc),
- organisation of domestic markets and international trade relations,
- access to inputs and credit,
- organisation of producers,
- organisation of support structures in terms of research, extension and advice applied to family production,
- land planning ...

### 5.3/ Building knowledge not only of techniques and their application, but also analytical skills and political and social awareness

In order to handle the complexities of the production process, members of the family farm unit must simultaneously acquire:

1. scientific knowledge and technical skills that will enable them to master changing production, processing and marketing techniques for agricultural products and food (mechanisation, fertilisation, crop care, accounting, etc) as well as changes in market demands and regulations (marketing, product quality, etc),
2. analytical and diagnostic skills (technical, economic, commercial, organisational, accounting, fiscal, social, etc) but also management skills so as to be able to adapt production systems to changes in the environment and ensure that production methods are viable, developable and reproducible in the future,

3. political and social awareness so that they can fully participate in society, as well as in the construction of a decentralised democracy, in reasoned management of natural resources and in the struggle against pandemic diseases; etc.

#### **5.4/ Bring the training premises and the areas where people live and farm closer together**

Agricultural and rural vocational training is not merely an instrument of economic and social policy; it also constitutes **social construction, created by all the different rural stakeholders**, who help craft a shared vision and shared goals. Rural vocational training is where the objectives, representations and strategies of students, their parents, agricultural professionals, trades workers or service providers, local bodies, educators, State administrations and so on all come together. This requires the participation of all these different stakeholders in the orientations and the management of the training mechanisms (board members, the centre, etc) and implies the establishments' administrative and financial autonomy.

In terms of the training courses themselves, it is important to match this vocational training to the reality of people's lives, and this involves:

- fostering a combination of working periods and study periods so as to enable a maximum number of people to reconcile the demands of their economic and family activity (especially for women) with the demands of the training programme,
- running the courses as close to the target group as possible, on premises where they already tend to go for other reasons (the educator travels to where the trainees are, and not vice-versa), and, if possible, on prestigious premises, especially if they are associated with a "professional" image (cooperative, management centre, etc),
- arranging for active professionals participate, utilising all the resources available in the locality (farmers, agricultural technicians and consultants, trades workers, storekeepers, professional leaders).

#### **5.5/ Focus the training on the people's situations and professional aspirations**

When dealing with communities where people are not highly qualified and not necessarily enthusiastic about taking part in training courses, **what may create the "need for training" is the offer of a programme that is focussed on the people's professional aspirations**. Indeed, it is people's professional aspirations that lead, if not to the demand itself, at least to interest in the training courses. A prior "demand" from the trainees is not necessarily, therefore, an adequate forecasting indicator of course registrations, inasmuch as this "demand" as it is formulated (if formulated at all) is based on representations of the training itself or perceived possible advantages of having completed it.

In communities where people are not highly qualified and who may have experienced difficulty or a feeling of failure when at school, there is often a preference for "hands-on learning" rather than "theoretical and abstract courses". Consequently, offering objectives that are closely related with people's occupational situations, covering their real-life problems and difficulties, should make it possible to negotiate training alternatives and ensure trainees' active participation in the courses.

Their professional aspirations need to be part of their economic and social reality. In developing countries, this generally means projects involving micro-businesses centred on agricultural production and processing or services. While the newly acquired knowledge or technical expertise may be useful in realising these projects, it is an understanding of economic aspects (accounting and business management) that are likely to play a determinant role.

Solutions for the farmers' individual, specific projects can be provided for in these training mechanisms only if the educators are familiar with the rural milieu and its activities, and work in close cooperation with professionals in the field.

## 5.6/ Diversify the training systems and ensure their consistency given the partnerships envisaged

Since the trainees form an extremely heterogeneous group (farmers, young adults, development agents, craftspeople, etc), it will only be possible to provide *en masse* training programmes suited to the needs of the various trainee profiles and local specificities by offering widely diversified training mechanisms. These may take the form, for example, of apprenticeships, technical courses, vocational continuing education, a combination of work and study, etc, and should utilise initiatives of all kinds, be they public, professional, private or conducted by associations.

Given the range of different issues that need resolving (trainee diversity, *en masse* training, adaptation of courses to local specificities, rigorous upstream management of human resources and public funding, cost control, etc), it appears that no solutions could ever possibly hope to rise successfully to the challenge unless they stem from an equally broad range of sources: from the State, non-governmental organisations, parents' associations, grass-roots associations, professional bodies, etc. With such a raft of different stakeholders and bodies, and the variety of different forms of training on offer (apprenticeship, a combination of study and work, short courses, technical courses, etc), care must be taken not to overlook the issue of overall coherence of these agricultural and rural vocational and technical training systems. **This coherence is to be overseen by the public authorities**, which need to set forth the general policy guidelines for education, guarantee the accessibility of knowledge for all, oversee approval of courses and bodies, quality assessment, course certification and the conferment of qualifications. These guidelines necessitate partnerships between the State and professional agricultural bodies, as well as with the entire corpus of economic and social rural stakeholders (associations, NGOs, local bodies and so forth).

## 5.7/ Ensure sustainable funding

Establishing vocational training systems for the rural milieu, involving so many varied stakeholders, requires the implementation of a sustainable, ongoing funding mechanism. While vocational training funds are currently being developed, generally stemming from the formal sector wage bill, these funds are already being used, partly, for the non-formal urban sector. It seems unlikely that they could also be stretched to cover rural vocational training, given their narrow financial base and the scale of the rural areas' requirements. Accordingly, specific funding sources are vital.

Since initial vocational education usually comes under the State's responsibility, it is generally also funded by the State, but ongoing vocational training is often financed through funds earmarked for economic sector modernisation. In many developing countries, there is no agricultural vocational training, neither at the initial level, nor in the form of continuing education; integration into the sector is part of one's learning within the family unit or occurs through gradual decentralisation of responsibilities. In such a context, it would be very tempting to finance the creation or renewal of initial vocational education with funds for continuing education.

Finally, fund management for this kind of training is usually tripartite in nature (State, employers and employees). This way of dividing up the funding is not realistic for the rural sector because of the magnitude of the informal system. However, professional organisations representing the various different forms of agriculture should be involved, and the same is true for the various rural sector stakeholders.

## 5.8/ Adapt the teaching methodology.

When dealing with people who are not highly qualified and not exceptionally eager for training, it is advisable to employ educational approaches that:

- focus on the farmers' ability to analyse their situation, to clarify their project and their objectives for taking their development in hand,
- use the participants' real-life experience, or "problematic situations", as a starting point, while not limiting the teaching to these patterns, so as to develop broader analytical frameworks,
- utilise educational situations that are varied and suitable to the trainees, but also to the course objectives and the content,

- alternate different modes of intervention while nevertheless ensuring the programme's overall consistency, and following a clearly identifiable guiding thread, understood by and negotiated with the trainees,
- employ, depending on the trainee profiles, adapted language, using local or international language,
- take the trainee profiles into consideration (age, sex, origin, type of production, social status, etc), with rural-dwellers tending to identify strongly with their various types of agriculture and profession.

### **5.9/ Ensure that vocational training, technical and higher education are complementary**

It is imperative that agricultural and rural vocational and technical training be planned with the needs of its primary beneficiaries in mind: the farmers themselves. Equally, it is very important to ensure that the overall system of agricultural and rural education remains consistent with:

- initial and continuing vocational education, in relation to the occupations themselves as well as social and professional integration;
- technical training, particularly as concerns middle-grade extension and consultancy professionals, as well as for the vocational training educators;
- and higher agronomic studies, responsible for training engineers who will be qualified not only to conduct systemic analyses of the rural milieu but also to train the educators and experts who design the vocational and technical training mechanisms needed by States, training centres, professional organisations, etc.

In the rural milieu, the various overhaul requirements for these vocational and technical training mechanisms may be implemented in "rural resource and training centres" (programme design, running activities, documentation and training) which are responsible for: designing teaching and training modules; producing documents and references; organising, running and monitoring basic training mechanisms and mobile training units' continuing education; and which may also offer initial technical courses (the BTA, an agricultural vocational training certificate taken at the age of sixteen, and the BTSA, taken after the age of eighteen). The basic vocational training sessions should be held as close as possible to the rural communities, with mobile teams that capable not only of conducting a concerted assessment of local training requirements, but also of running the sessions, using local skills and existing premises wherever practicable.

*Given these analyses and observations, it would appear that en masse education and vocational training for young rural people is an absolutely vital element of any development and anti-poverty policy. Consistent with the various aspects of rural development policy, education and vocational and technical training are needed in times of change not only so as to promote income-generating activities and growth in the rural milieu, but also to offer a greater chance of success to those who opt for life in the city.*

## REFERENCES

- DEBOUVRY Pierre, presentation given in the workshop, “*Formation de masse en milieu rural - atelier pour l’Afrique subsaharienne - Eléments de réflexion pour la définition d’une politique nationale*”. (En Masse Training in the Rural Milieu: Workshop for Sub-Saharan Africa – Towards a national policy.) Ouagadougou. 2005. [http://www.agropolis.fr/formation/pdf/atelier\\_ouagadougou/debouvry.pdf](http://www.agropolis.fr/formation/pdf/atelier_ouagadougou/debouvry.pdf) and slides can be viewed at [http://www.agropolis.fr/formation/pdf/atelier\\_ouagadougou/snfar1.pdf](http://www.agropolis.fr/formation/pdf/atelier_ouagadougou/snfar1.pdf) (both in French)
- DEBOUVRY Pierre, presentation to the ACRA / FAO workshop, “*Education for Rural People (ERP) and Rights Based Approaches to Food Security – Towards a Participatory Approach in Fighting against Poverty*”. Rome. 2006.
- DEBOUVRY Pierre, contribution to the sub-regional seminar on training and consultancy for the promotion of rural family farms. Saint Louis. 2007.  
[http://www.agropolis.fr/formation/pdf/atelier\\_ouagadougou/actes.pdf](http://www.agropolis.fr/formation/pdf/atelier_ouagadougou/actes.pdf) (French)
- FUSILLIER Christian. “*Etude pour la relance des interventions de l’expertise française en matière de formation professionnelle agricole dans les pays d’Afrique subsaharienne*”. (Study on the renewed input of French expertise in relation to agricultural vocational training in sub-Saharan African countries.) IRAM. December, 2004. [http://www.agropolis.fr/formation/biblio/2005\\_rapport\\_final\\_IRAM.pdf](http://www.agropolis.fr/formation/biblio/2005_rapport_final_IRAM.pdf) (French)
- Think-tank on the economics of agricultural and rural training. Summary of discussions. Ministry of Foreign Affairs / Inter-Ministerial Committee on International Cooperation and Development. May, 2007.  
[http://www.agropolis.fr/formation/pdf/2007\\_rapport\\_final\\_eco\\_formation.pdf](http://www.agropolis.fr/formation/pdf/2007_rapport_final_eco_formation.pdf) (French)
- MFA / MAF working group “*Ingénierie des dispositifs de formation à l’international*”. (Training Programme Design at the International Level.) Final report. November, 2002.  
[http://www.agropolis.fr/formation/biblio/Document\\_1\\_Bibliothèque.doc](http://www.agropolis.fr/formation/biblio/Document_1_Bibliothèque.doc) (French)
- Ministry of Foreign Affairs / Inter-Ministerial Committee on International Cooperation and Development. “*La coopération française face aux défis de l’éducation en Afrique: l’urgence d’une nouvelle dynamique*”. (French Cooperation and the Challenges of Education in Africa: The urgent need for new impetus.) Report from the working group on strategic approaches to cooperation in education. May, 2007.  
[http://www.agropolis.fr/formation/pdf/mae\\_dgcid\\_mai07.pdf](http://www.agropolis.fr/formation/pdf/mae_dgcid_mai07.pdf) (French)
- WALTER Richard, GAURON André. “*Les mécanismes de financement de la formation professionnelle dans 5 pays de l’Afrique subsaharienne*”. (Funding Mechanisms for Vocational Training in Five Sub-Saharan African Countries.) Ministry of Foreign Affairs / Inter-Ministerial Committee on International Cooperation and Development. January, 2006.  
[http://www.agropolis.fr/formation/pdf/2007\\_rapport\\_final.pdf](http://www.agropolis.fr/formation/pdf/2007_rapport_final.pdf) (French)